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ABSTRACT

This instructor's manual provides background information and critical resources needed to use the curriculum "Counselor Role and Educational Change: Planning, Integration, and Basic Skills." Counselor educators, instructors, and staff developers are encouraged to review the Instructor's Manual before using any material or lessons within the curriculum. It is noted that the curriculum is designed to be used either as a stand-alone course, as a self-directed independent study, or as a staff development effort. After a project overview these topics are covered: (1) how the curriculum was developed; (2) site visit report which presents seven important elements to consider when developing counselor education materials; (3) areas of emphasis in the curriculum; (4) key principles of curriculum development; (5) the counselor education curriculum; (6) guide to lesson categories (perennial problem, practical problem, justification for lesson, learner outcomes, instructor resources, teaching-learning interaction, debriefing strategies, additional resources, individual learning plan, transparencies and handouts); (7) practical problems; and (8) learner outcomes. Handouts for students are included in a section of instructor's resources. (ABL)

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COUNSELOR
EDUCATION

Counselor Role and Educational Change: Planning, Integration, and Basic Skills

INSTRUCTOR'S MANUAL

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COUNSELOR
EDUCATION

Counselor Role and
Educational Change:
Planning, Integration,
and Basic Skills

Richard W. Feller
Joseph L. Daly

School of Occupational
& Educational Studies
Colorado State University

INSTRUCTOR'S MANUAL

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This curriculum, Counselor Role and Educational Change: Planning, Integration, and Basic Skills, was developed and written with guidance from experts in the field committed and dedicated to improving school counselor education and providing comprehensive school counseling and guidance programs. We sincerely thank the members of our Working Group for their contributions. The members of the Counselor Education Working Group were: Lee Bender, Cherry Creek Schools; Michael A. Demma, Eastman Kodak Company; Norman C. Gysbers, University of Missouri; Kenneth B. Hoyt, Kansas State University; Marjorie M. Mastie, Washtenaw Intermediate School District; Joe McDaniel, Mississippi State Department of Education; Juliet V. Miller, Worthington, OH; Nancy S. Perry, Maine State Department of Education; Pat Schwallie-Giddis, American Counseling Association; and Garry R. Walz, University of Michigan.

Counselor education programs at universities across the country served as visitation and field test sites. The input provided by both groups expanded and improved the final product. We are indebted to faculty, teachers, and students at the following institutions for their insight during the site visitation phase of this effort: Eastern Michigan University, Kearney State College, Oakland University, University of Central Florida, University of Georgia, University of Idaho, University of Tennessee, University of Wisconsin - Stout, Southwestern Oklahoma State University, and Virginia Polytechnic Institute and State University.

We are also indebted to the following individuals who served as site coordinators during the field test process: Jack Casey, Sonoma State University; Ron Frederickson, University of Massachusetts; Carlyle Gilbertson, University of Wisconsin - Stout; Ken Hughey, Kansas State University; Marla Peterson, University of Tennessee; Ron Redmond, Loyola College; Kathryn Reilly, California State University - San Bernardino; Deborah Rifenbary, University of New Mexico; and Howard Splete, Oakland University.

Francine Hultgren of the University of Maryland shared the Perennial and Practical Problem approach used in the Home Economics Curriculum in Maryland. This was a significant point in our curriculum development effort. We hope our curriculum model

reflects the impact of her work. Jerry Terrill, Keith Dixon, Linda Williams, Linda Chase, Susan Illic, Mary Brouillette, Jean Lamm, Greg Knoll, Nat Kees, Robert Williams, Darryl Yagi, Tracey Seltzer, Carmen Manning, Steve Willich, and Phyllis Beard all provided significant feedback to our ideas and materials, for which we are very grateful.

The School of Occupational & Educational Studies at Colorado State University has an integrated faculty of vocational and general educators within which the counselor education program is housed. The counselor educators on this contract want to recognize the contributions of this integrated faculty. Discussions about the future of vocational education and perceptions of school counselors have increased our understanding and commitment to academic and vocational integration. These discussions have also encouraged us about the potential role of school counselors in educational change through the promotion of comprehensive counseling and guidance programs. We appreciated the leadership, guidance, and support provided by R. Brian Cobb, Project Director, and Nancy Hartley and Jaime Stefan, Project Coordinators. Gene Gloeckner and Cathy Love provided considerable insight into the role of integration as we worked on this effort.

In the two years in which we have worked on this project, many people have added to it in important ways. Staff, graduate students, and student workers too numerous to mention have contributed considerable time and energy. Thanks to each of you.

Joseph Daly and Richard Feller

USING THE INSTRUCTOR'S MANUAL

Purpose

The Instructor's Manual provides background information and critical resources needed to use the curriculum, Counselor Role and Educational Change: Planning, Integration, and Basic Skills. Counselor educators, instructors, and staff developers are encouraged to review the Instructor's Manual before using any material or lessons within the curriculum. The curriculum is designed to be used either as a stand alone course, as a self directed independent study, or as a staff development effort. It is assumed that individual books or lessons from the curriculum will be infused into counselor education courses.

Getting Started

To gain an understanding of the context from which the curriculum was developed, read:

- Project Overview
- How the Curriculum was Developed
- Site Visit Report
- Areas of Emphasis in the Curriculum

Getting to Common Language

To gain an understanding of the language driving the curriculum and materials, read:

- Key Principles of Curriculum Development
- The Counselor Education Curriculum
- Guide to Lesson Categories
- Practical Problems
- Learner Outcomes

Overview Resources

To quickly access key points and find useful handouts for students, read the materials in the Instructor Resources section:

- Beyond the Three R's
- Models of Integration
- Comprehensive Counseling and Guidance Programs: Delivering the Basic Skills
- Executive Summary: The Secretary's Commission on Achieving Necessary Skills (SCANS)

PROJECT OVERVIEW

The goal of this federally funded project was to develop, field test, and disseminate two sets of materials, one for use by school counselor educators and the other for use by vocational teacher educators, showing how to integrate basic skills into vocational education. The set of materials described in this Instructor's Manual was developed primarily for use by school counselor educators. It includes six curriculum books and a review of literature. The other set of materials, Integrating Basic Skills into Vocational Teacher Education Curricula, developed for use by vocational teacher educators, includes five curriculum books and a review of literature.

To develop the preservice curriculum in counselor education, a four step process was used. First, a Working Group team of national experts in counselor education, school counseling, and comprehensive counseling and guidance programs was formed to assist project staff in all phases of the work. The duties of the Working Group included identification of competencies, assistance in locating materials, suggestions for field test sites, recommendations for content of materials, review of materials, and guidance in dissemination processes. Second, a review of literature was written. Third, site visits were made to nine institutions with school counselor education programs. Each of these institutions had undergone a nomination and assessment process to ensure that instruction in comprehensive counseling and guidance programs was included in their preservice curricula. Finally, the Working Group's reviews, the literature review, and the site visit reports were analyzed to lay the foundation for the curriculum.

The draft school counselor curriculum was then field tested at nine institutions with school counselor education programs. The project staff worked closely with Field Site Coordinators to infuse the materials into their ongoing school counselor education programs. The outcome of the field tests was a series of reports suggesting modifications in the content, format, and instructional delivery processes for the curriculum materials.

The authors believe that the school counselor can play a significant role in educational change. Planning how to integrate basic skills into curriculum and then doing so will require a change in the school counselor's role. In our view, this change should have as its primary focus the implementation of comprehensive school counseling and guidance programs. We believe that if school counselors are trained in such comprehensive programs, the principles of which are described in this curriculum, they will be better able to help students with two essential tasks: planning how to acquire the basic skills they need to succeed, and then acquiring them.

HOW THE CURRICULUM WAS DEVELOPED

October 1990 — Funding provided by the U.S. Department of Education, Office of Vocational and Adult Education
Colorado State University Staff and Expert Work Team Selected Lee Bender, Mike Demma, Norm Gysbers, Ken Hoyt, Marge Mastie, Joe McDaniel, Julie Miller, Nancy Perry, Pat Schwallie-Giddis, Gary Walz
Literature Review Written
Counselor Education Site Visits Conducted Eastern Michigan University, Kearney State University, Oakland University, Southwestern Oklahoma State University, University of Central Florida, University of Georgia, University of Idaho, University of Tennessee, University of Wisconsin - Stout, Virginia Polytechnic Institute and State University
Curriculum Field Tests Conducted California State University - San Bernardino, Kansas State University, Loyola College, Oakland University, Sonoma State University, University of Massachusetts, University of New Mexico, University of Tennessee, University of Wisconsin - Stout
Curriculum Revised
Curriculum Delivered — July 1992

SITE VISIT REPORT

After visiting nine counselor education program sites, the project staff identified the following as important elements to consider when developing counselor education materials.

1. School counselor education in a larger context. School counselor education exists as a subset of counselor education. One cannot be separated from the other. Resource decisions and curriculum priorities within counselor education greatly influence the program direction, faculty goals, and experiences available to those preparing to become school counselors.

2. Participation in statewide and national counseling projects and how it relates to support of comprehensive counseling and guidance programs. A fairly direct relationship exists between these two elements: (1) a counselor education program's participation in state funded and national initiative projects, and (2) the amount of support the program gives to comprehensive counseling and guidance programs. The project staff found that counselor education programs with faculty involved in efforts such as the National Career Development Guidelines usually placed more emphasis on comprehensive programs in their school counselor education curricula than did programs not involved in such activities.

3. Faculty and student demographics. Invariably, most counselors-in-training at the program sites were white females with little or no teaching experience. This is significant in relation to changing school demographics. It also indicates a greater need for preservice t[illegible]rovide support in areas related to curriculum. This would facilitate school coun[illegible]ors playing more significant roles as guidance curriculum developers and education change advocates. The project staff also found two converse situations: (1) In general, counselor educators in positions to set policy and establish program priorities had little recent school counseling experience. They therefore had little firsthand knowledge of the issues needing to be addressed in the policies and programs they were establishing. (2) School counselors serving as part-time faculty were not included in faculty meetings in which policies were established. Therefore, their valuable, current experience dealing with critical student issues went unheard when program priorities were being set.

4. Curriculum use and acceptance. University professors are independent, and take pride in local or personally developed curriculum. Finding little evidence that national curriculum materials were being infused into local programs, the project staff was reminded about the value of providing resources that could be easily adapted to fit into existing curricula.

5. School restructuring, vocational education, and organizational change. At present, there is little active interaction between those in the fields of teacher education and counselor education. That gap appears to be growing as counselor education becomes more specialized. Many programs train "professional counselors who may work in school settings" as opposed to specifically training "school counselors" who are provided with a strong foundation in issues related to school restructuring, vocational education, and organizational change.

6. Institutional support and structure. The degree of support provided to counselor education from one campus to the next varies greatly. The variety of structures within which school counselor education is provided amplifies the lack of standardization across states and programs.

7. Desired training materials. The potential usefulness of national curriculum materials appears to depend primarily on the ease with which they can be adapted for local use. Providing videos and case studies seems highly appreciated. Providing resource books or current literature is helpful. Making materials easy to access and delivering them camera-ready seems a requirement. Student materials purchasable through campus bookstores are welcomed.

AREAS OF EMPHASIS IN THE CURRICULUM

While many areas of school counselor education deserve additional attention, the following content areas merit specific acknowledgement in terms of the goals of this project.

1. Intrinsic value of comprehensive counseling and guidance programs. Comprehensive counseling and guidance programs are, by definition, comprehensive; i.e., all students, not just those planning on college, are given access to counseling and guidance services. Comprehensive counseling and guidance programs can facilitate the success of all students, regardless of their course selections, "track," or place in school. In addition, by ensuring that school counselors-in-training know that as professional school counselors they will be serving *all* students, comprehensive counseling and guidance programs can promote these counselors' support of items such as (a) the integration of academic and vocational education, (b) the promotion of basic skills training for students, (c) the redesigning of curriculum to increase its relevance, in light of changes in the workplace and in the nature of work, and (d) the National Career Development Guidelines.

2. Importance of ongoing career development for school counselors. As one considers the restructuring of schools, it becomes clear that greater attention must be placed on the status of youth in society. With such change, it is also imperative that the commitment to professional renewal be infused into any school counselor preparation curriculum.

KEY PRINCIPLES OF CURRICULUM DEVELOPMENT

Mission Statement

The mission of this school counselor education curriculum is the following: To empower school counselors to help students deliberately plan a sequence of courses that will ensure students' acquisition of the basic skills they will need for future success in their work, their families, and their continued education.

Perennial Problem

How can comprehensive school counseling and guidance programs contribute to the delivery of the basic skills?

Goals

To help school counselors-in-training ...

- Meet the educational planning and career planning needs of all students.
- Develop an understanding of the skills necessary for success in school, work, and family within a democratic society.
- Facilitate student acquisition and application of the new basic skills. Some of these skills can be acquired through didactic-cognitive learning; others demand work-based learning and commitment to learning-by-doing.
- Develop comprehensive school counseling and guidance programs.
- View themselves as professionals who can help students learn to plot their education and plan their futures.
- Clarify the role and responsibilities of school counselors in school restructuring.

We Believe That:

- School counselors should be educators as well as professional counselors.
- School counselor education should be built on a foundation of educational-developmental theory and practice as well as psychological theory.
- School counselor education should promote comprehensive school counseling and guidance programs.
- School counselors should be committed to continuous improvement and renewal.
- A comprehensive school counseling and guidance program is delivered through a partnership of counselors, teachers, students, parents, administrators, and the community working together.
- A comprehensive school counseling and guidance program should be evaluated on the basis of student outcomes.
- School counselors should collaborate with educational personnel and community based organizations in advocating educational change which enables all students to succeed in work, family, and school.
- Schools should increase their efforts to deliver the life skills that enable success in school, at work, and in the family.
- Every student is valued, has worth, and can succeed.

Basic Skills

Within the review of literature titled Counselor Role and Educational Change: Planning, Integration, and Basic Skills, there is an extensive discussion of the "basic skills." This review of literature can be used as an instructor resource in preparing to teach this curriculum. While no lesson requires that students have participated in a prior lesson in the curriculum to understand the current lesson, some familiarity with various definitions of "basic skills" is critical. For this reason, three references are included in this Instructor's Manual. The handout titled Beyond the Three R's contains material from three sources: (1) the American Society for Training and Development, (2) the Secretary's Commission on Achieving Necessary Skills (SCANS), and (3) the New York State Steering Committee. As the handout makes clear, the definition of basic skills is dynamic. It is the intent of this curriculum to help school counselors see that the basic skills are more than the traditional Three R's, and that school counselors and guidance professionals have much to contribute to students' acquisition of these skills.

Integration

Integration is also explained in detail within the review of literature. Teachers are not the only education professionals potentially affected by proposals to "integrate" academic and vocational instruction and content; school counselors may be affected as well. To help familiarize users of this curriculum with various proposed integration models and strategies, a handout titled Models of Integration is provided at the end of this Instructor's Manual.

Resources

The authors have also included a handout titled Comprehensive Counseling and Guidance Programs: Delivering the Basic Skills. This is an original article describing the issues addressed in the current curriculum. Also included is the Executive Summary of The Secretary's Commission on Achieving Necessary Skills (SCANS).

To provide instructors with an array of current resources, the 19 lessons contained in Books 2 - 6 of this curriculum include full and abstracted articles, major quotations, article outlines, and newsletters consisting of abridged forms of articles. Instructors are encouraged to consult with and refer students to original sources and the full text of materials.

THE COUNSELOR EDUCATION CURRICULUM

Book	Lesson
Book 1	Instructor's Manual
Book 2: Preparing Counselors to Serve Diverse Students	Societal Trends and the Status of Youth
	The Status of Youth and Basic Skills Acquisition
	Special Populations
Book 3: Basic Skills, Integration, and the School Counselor	Tenets and Issues of Integration
	Models of Integration
	Basic Skills
	Learning the Basic Skills
Book 4: Planning For Success In Tomorrow's Workplace	Change in the Workplace
	Basic Skills in the Changing Workplace
	Labor Market Projections
	Basic Skills and the International Marketplace
Book 5: Comprehensive School Counseling and Guidance Programs	Student and Counselor Competencies
	Counselor Role Models
	Comprehensive Counseling and Guidance Programs
	Life Career Plans
Book 6: Educational Change and Counselor Renewal	School Restructuring
	Educational Change
	Assessing Professional Renewal Needs
	Identifying Best Practices

GUIDE TO LESSON CATEGORIES

Each lesson format is identical, and each category within a lesson has its own icon for ease in locating the category in any lesson. Lesson categories are described below.

Perennial Problem

A Perennial Problem is one faced over and over by successive generations of counselor educators and school counselors. Perennial Problems include enduring questions about how to improve the quality of education. Posing curriculum lessons as Perennial Problems avoids focusing on time-specific problems. Developers of this curriculum have used the Perennial Problem approach throughout the curriculum. This approach provides a convenient framework for training school counselors in issues related to student planning and student acquisition of basic skills.

Practical Problem

A Practical Problem identifies an action that can help address the Perennial Problem. This action is born of reasoned thought and sound judgment. Posing a Practical Problem in a curriculum is a way of focusing on affective and cognitive processes, on knowledge and values, on life experiences, and on thought and action.

Justification for Lesson

To develop this curriculum, school counselors who have designed and implemented comprehensive counseling and guidance programs were asked, "When you were studying to become a school counselor, what instruction would you have liked to have received to prepare yourself for helping students plan their futures and acquire the basic skills?" The school counselors' responses to this question, along with responses from counselor educators, helped determine the lessons contained in this curriculum. The Justification for Lesson describes the contribution each lesson can make in preparing school counselors to facilitate student planning and student acquisition of the basic skills.

Learner Outcomes

A Learner Outcome is a competency, level of knowledge, or quality that learners should be able to demonstrate when they complete the lesson.

Instructor Resources

This section lists all materials and supplies needed for the lesson, and gives guidelines for copying, adapting, and distributing necessary resources.

Teaching-Learning Interaction

The Teaching-Learning Interaction is the heart of the lesson. It includes suggested steps for the counselor educator to follow in giving the lesson.

Debriefing Strategies

Debriefing Strategies are options for summarizing the lesson. In counselor education classes, a learner needs the opportunity to discuss the content learned and the implications for practice as a school counselor. Debriefing is a critical part of the lesson. Planning time for debriefing is essential.

Additional Resources

The list of Additional Resources in each lesson provides the counselor educator with resources for studying the lesson's topic in greater depth. These Additional Resources may also be used as outside materials for learners.

Individualized Learning Plan

If a learner is studying this content in an individualized program, he or she should be given the entire lesson. The learner should read all materials and complete all assignments and activities. Written responses in the form of a paper can be used to verify completion of the lesson. Note: As part of this learning experience, the learner should be asked to identify a counselor in the schools with whom to discuss the questions and issues of each lesson.

Transparencies and Handouts

Camera-ready transparencies and handouts are provided within each lesson. Instructors are encouraged to pull out these materials from the bindings of the curriculum books as needed for transparency production or photocopying.

PRACTICAL PROBLEMS

As a preliminary step in writing the current school counselor curriculum, the project staff visited nine institutions with counselor education programs. From these visits and from the research gathered while writing the review of literature for this project, the project staff identified 10 issues it believes should be addressed by counselor education programs training school counselors. These 10 issues all relate to the potential role of the school counselor in helping students plan their coursework in a way that ensures their acquisition of the basic skills needed for lifelong success. Specifically, they relate to the school counselor's role in (1) integrating basic skills instruction into vocational coursework or combined academic and vocational coursework, and (2) helping students plan their coursework to bolster their life goals. The following 10 Practical Problems are based on the 10 issues identified by the project staff in the course of developing the new school counselor curriculum.

1. What should be done to help school counselors facilitate the educational and employment transitions of all students (including special populations)?

2. What should be done about school counselors' understanding of the tenets associated with (1) combining academic and vocational education and (2) integrating basic skills into vocational education?

3. What should be done about school counselors' knowledge of the various definitions of basic skills and their impact on curriculum design and content?

4. What should be done to help school counselors identify the basic skills necessary for success in a changing workplace?

5. What should be done about school counselors' knowledge of changing student demographics and the increased needs of youth?

6. What should be done about transforming school counseling programs to comprehensive counseling and guidance programs?

7. What should be done to help school counselors assist all students to develop individual life/career plans?

8. What should be done about school counselors' understanding of school restructuring and school improvement?

9. What should be done to help school counselors influence educational change to better meet the needs of all students?

10. What should be done about keeping school counselors professionally current within the changing structure of public education?

LEARNER OUTCOMES

In the curriculum, each Practical Problem has been addressed through the development of Learner Outcomes. Each Learner Outcome and its supporting materials stand alone. Learner Outcomes do not need to be addressed sequentially. The following 19 Learner Outcomes are featured in the curriculum.

1. The learner will identify and discuss the societal trends that affect the status of youth and describe how these trends affect student needs.

2. The learner will integrate information concerning the status of youth with information concerning the acquisition of the basic skills.

3. The learner will recognize how competency requirements and other areas need to be adapted when working with special populations.

4. The learner will identify and describe the major beliefs and tenets promoting the integration of academic and vocational education.

5. The learner will understand the proposed models of integration.

6. The learner will identify and integrate appropriate student basic skills into a comprehensive counseling and guidance program.

7. The learner will possess knowledge and appreciation of those basic skills most appropriately learned through didactic instruction and those best learned through some form of work based learning.

8. The learner will acquire expertise and interest in keeping current regarding the nature of change in the workplace.

9. The learner will understand and appreciate the basic skills needed for success in the changing workplace.

10. The learner will know, understand, and appreciate ways in which projections pertaining to the changing workplace are made.

11. The learner will understand the competencies needed by K-12 students if they are to meet self knowledge, educational, occupational, and career planning goals.

12. The learner will analyze the purpose, outcomes, and curriculum of K-12 comprehensive counseling and guidance programs.

13. The learner will understand how comprehensive counseling and guidance programs provide support for developing life/career plans.

14. The learner will evaluate the literature regarding school restructuring and school improvement.

15. The learner will recognize power and influence sources, and analyze stakeholders' efforts to effect change.

16. The learner will be able to assess his or her professional renewal needs, and adopt behaviors required to function effectively in a comprehensive counseling and guidance program.

17. The learner will identify and analyze the best counseling programs and practices and use their findings to improve counseling and guidance programs.

18. The learner will understand the importance of the basic skills in helping students compete in the international workplace.

19. The learner will understand the concepts and tenets of the clinical-psychological and educational-developmental models that influence the learner's role in promoting comprehensive counseling and guidance programs.

INSTRUCTOR RESOURCES

Beyond the Three R's

Workplace Basics[1]

- **Learning to Learn**
- **Reading, Writing, and Mathematics**
- **Communication**
- **Adaptability:** ***Creative and Critical Thinking, Problem Solving***
- **Personal Management:** ***Self-Esteem, Goal Setting/Motivation, Personal/Career Development***
- **Group Effectiveness:** ***Interpersonal Skills, Negotiation, and Teamwork***
- **Influence:** ***Organizational Effectiveness and Leadership***

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[1]Adapted from: Carnevale, A. P., Gainer, L. J., & Meltzer, A. S. (1988). Workplace basics: The skills employers want. Alexandria, VA: American Society for Training and Development. (ERIC Document Reproduction Service No. ED 299 462)

Beyond the Three R's, continued

SCANS Basics[2]

The SCANS basic skills profile is made up of five competency areas and three foundation sets of skills that are considered necessary for solid job performance. These include:

Competencies: Effective workers can productively use:

- **Resources** — allocating time, money, materials, space, and staff;
- **Interpersonal Skills** — working on teams, teaching others, serving customers, leading, negotiating, and working well with people from culturally diverse backgrounds;
- **Information** — acquiring and evaluating data, organizing and maintaining files, interpreting and communicating, and using computers to process information;
- **Systems** — understanding social, organizational, and technological systems, monitoring and correcting performance, and designing or improving systems;
- **Technology** — selecting equipment and tools, applying technology to specific tasks, and maintaining and troubleshooting technologies.

Foundation: Competence requires:

- **Basic Skills** — reading, writing, arithmetic and mathematics, speaking, and listening;
- **Thinking Skills** — thinking creatively, making decisions, solving problems, seeing things in the mind's eye, knowing how to learn, and reasoning;
- **Personal Qualities** — individual responsibility, self-esteem, sociability, self-management, and integrity.

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[2]Secretary's Commission on Achieving Necessary Skills (SCANS). (1991). What work requires of schools: A SCANS report for America 2000. Washington, DC: U.S. Department of Labor.

Beyond the Three R's, continued

New York Steering Committee[3]

BASICS

Reading
- understand written material
- follow written instructions
- put readings in context
- summarize main and subsidiary ideas
- locate specific facts and details
- differentiate fact from inference
- interpret information in charts and tables
- use operating manuals
- understand technical and abstract material

Writing
- apply rules of grammar, spelling, and punctuation
- write clearly
- write legibly
- take notes and develop outlines
- organize information into logical paragraphs
- compose letters, reports, and memoranda
- proofread and edit material
- locate sources of information
- reference sources correctly
- draft a project proposal

Speaking/Listening
- understand oral directions
- present oral information and directions
- observe verbal and nonverbal cues
- participate in a discussion

Mathematics
- add, subtract, multiply, and divide (whole numbers, fractions, decimals)
- measure using standard and metric systems
- depict relationships using tables, charts, and graphs
- apply the principles of algebra and geometry
- create and use simple statistics and probability
- solve ratio, proportion, and multiple-step problems
- estimate outcomes

EXPANDED BASICS

Thinking Skills
- problem solving
- decision making
- reasoning
- creative and critical thinking

Human Relations
- interpersonal skills
- working as a member of a team
- leadership skills
- handling conflict and criticism
- working cooperatively and competitively

Information Systems
- enter, manipulate, retrieve, analyze, and synthesize data

Organizational Skills
- goal setting
- coping with deadlines
- following directions
- setting priorities

Personal Skills
- personal work habits
- adaptability
- workplace values and ethics
- study habits
- ability to negotiate the system
- personal and civic responsibility
- initiative
- building self-esteem

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[3]Dagget, W. (1991, May 21). Colorado Community College and Occupational Education System Presentation, Denver, CO.

Models of Integration[4]

Model 1: Incorporating academic competencies into vocational courses

a. Probably simplest form of integration.
b. Relabelling of the informal reinforcement of basic academic skills in vocational classes.
c. Using developed off-the-shelf curriculum materials which identify academic competencies.
d. Academic competencies stressed are generally simple or lower level.
e. Does nothing to change the separation between academic and vocational teachers, programs, and students.
f. Taught by vocational teachers.

Model 2: Combining academic and vocational teachers

a. Academic teachers initiate the teaching of academic competencies in vocational programs.
b. Assigning academic teachers to Area Vocational Center part- or full-time to work with vocational teacher or to team teach.
c. Strength of this model is in collaboration.
d. Presence of academic teacher gives status to academic skills.
e. Most academic content is remedial.

Model 3: Making academic curriculum more vocationally relevant

a. Academic teachers incorporate vocational examples into their courses.
b. More common approach is to introduce specific new courses ("applied academics").
c. Sometimes used to substitute for lower level academic courses.
d. Used as electives with no courses dropped from the course offerings.
e. Most popular form of integration.
f. Unless linked to vocational programs and teachers, true integration may not take place.

Model 4: Modifying academic and vocational education — curriculum "alignment"

a. Changes the content of both academic and vocational courses.
b. Coordinates existing teachers and courses.
c. Relies on locally developed curricula or modified "off-the-shelf" curricula.
d. Incorporates elements from Models 2 and 3.
e. Many teachers use Applied Academic materials.
f. Teacher collaboration and student mixing.
g. Cooperative learning.

Model 5: Academy model

a. Operate as schools within schools.
b. Teacher collaboration.
c. Student groups work with teacher groups.
d. Business, industry relationships.
e. Motivate potential drop-outs.
f. Does not reduce tracking of students.

Model 6: Replacing conventional departments with occupational clusters

a. Replace conventional departments.
b. Departments organized along occupational lines.
c. Career-cluster departments recommend specific course sequence.
d. Promotes teacher collaboration.
e. Reduces "turfism."
f. Expanded Academy Model.
g. Reduces tracking of students.

Model 7: Single-occupation high schools

a. Similar to academies except occupational emphasis is school-wide.
b. Academic instruction is more vocational.
c. Reduces student tracking.
d. Promotes opportunities for teacher collaboration.

Model 8: Electing career paths or occupational majors

a. Maintain conventional academic and vocational departments.
b. Students elect a "career path" to follow.
c. Integrate career-related information into academic subjects.
d. Reduces "curriculum cafeteria" approach.

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[4]Law, D., & Pepple, J. (1990, November). Paper presented at the Integration Conference, Greeley, CO.

Comprehensive Counseling and Guidance Programs: Delivering the Basic Skills

by Rich Feller and Joseph Daly[5]
Colorado State University

In a time of school restructuring and global workplace transformation, students still ask their counselors, "Why do I need to take that course?" The counselor's well-informed answer can help steer students toward courses that will provide them with the basic skills they need to succeed not just in school but at work and in their personal lives.

Today's well-informed, effective school counselor is increasingly committed to the concept of comprehensive counseling and guidance programs, which provide counseling and guidance services to all students, not just those who are college-bound or in crisis. Consequently, these comprehensive programs provide for increased counseling and guidance services to vocational education students. School counselors working in comprehensive counseling and guidance programs could therefore play a key role in assuring that vocational education students receive the basic skills instruction so critical to their future personal and professional success. This article suggests that, in the area of basic skills acquisition, a new role is emerging for both school counselors and comprehensive counseling and guidance programs.

What Have Counselors Been Doing?

What are school counselors doing? Most national school reform studies fail to offer even minor acknowledgement of counselors and/or guidance professionals; yet, school counselors have long argued for changes in school structure, programmatic guidance efforts, and curriculum reform, as well as academic and vocational education integration. Faced with the consequences of students not perceiving a relationship between school and their futures, and curriculum unresponsive to an increasing number of students, counselors have argued for applied learning, workbased learning, attention to learning style differences, career planning, and course relevancy.

Counselors recognize that employers today demand skills that students can only acquire through a challenging and focused high school educational program. They have learned that debating the merits of vocational education over college prep is both useless and irrelevant. More than ever, students need both vocational and academic competencies to prepare themselves for employment in more than "dead end" jobs. Counselors recognize that the skills necessary for lifelong learning and successful long term employment are the same.

Often criticized for their detachment from vocational programs, counselors are

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expected to perform roles as varied as the schools within which they work. Some are advocates for students confronting severe family and social changes, while others are saddled with large amounts of "administrivia." Still others confront substance abuse, suicide, and teen pregnancy as regular parts of their day. In light of this workload, an increasing number of school counselors argue that quality curriculum choices, along with a developmental guidance curriculum and adequate planning help, are not available to all. These laments, which are not new, underscore the need to clarify priorities if school counselors and comprehensive counseling and guidance programs are to exist and meet increased demands.

Comprehensive Counseling and Guidance Programs

Ironically, just when accountability has left many counselors vulnerable and even displaced, guidance technology has become quite sophisticated through the leadership of Norm Gysbers and his associates (1988).

The idea of comprehensive counseling and guidance programs is increasingly replacing the traditional counselor/clinical services model. This model features the concept of position, with the role and function of the counselor kept remote from the instructional role and function of the school. Comprehensive counseling and guidance programs differ from the traditional counselor/clinical services model by emphasizing that the work of the counseling and guidance team should include four components: guidance curriculum, individual planning, responsive services, and system support.

Gysbers has long argued for guidance to be defined as an organized, outcome based and accountable part of education, as opposed to being defined in terms of what counselors in positions do. This change from position to program as the basic organizer for guidance in the schools represents a paradigm shift for school counselors, as it removes them from non-guidance activities.

Considerable changes in the expectations of principals and staff are required, as is a clear understanding of five basic axioms upon which the program concept rests:

1. Guidance is a program with learner outcomes.
2. Guidance and counseling programs are developmental and comprehensive.
3. Guidance programs focus on individuals' competencies, not just their deficiencies.
4. Guidance and counseling programs are built on a team approach.
5. Guidance and counseling programs mandate linkages and articulation.

As school counselors are trained in this model, one can expect that counseling and guidance programs will receive greater acknowledgement from those who are restructuring schools. As curriculum reform incorporates an expanded definition of the basic skills, counseling and guidance as a program, and counselors as educators, will be counted upon to help students acquire these critical skills.

Delivering the Basic Skills, continued

The Basic Skills

Today, the skills needed to be an effective worker, family member, and lifelong learner are becoming more sophisticated and are no longer covered by the traditional "three R's." Workplace basics now include skills long promoted within the guidance curriculum and advanced in the career education movement (Hoyt, 1980). Process skills (group effectiveness, goal setting, problem solving, etc.), highlighted by the American Society for Training and Development (Carnevale et al., 1988), and personal qualities (individual responsibility, self esteem, sociability, etc.), promoted by the Secretary's Commission on Achieving Necessary Skills (SCANS, 1991) acknowledge that student and worker success depend on more than job specific training and improved SAT scores. While "the basics" are debated and defined, and America 2000's six national education goals lead the reform agenda, the guidance community embraces the National Career Development Guideline Competencies, developed by the National Occupational Information Coordinating Committee (NOICC, 1989), as complementary to "the new basics."

The Twelve Competency Categories of the National Career Development Guidelines[6]

1. Knowing the importance of self concept and learning the skills to maintain a positive one.
2. Skills to interact positively with others.
3. Understand change, growth, and transitions.
4. Understand the relationship between education and career opportunities.
5. Develop positive attitudes and skills to participate in work and lifelong learning.
6. Locate, evaluate, and interpret career information.
7. Job seeking and changing job skills.
8. Understand how society's needs and the economy influence the structure of work.
9. Learn to make decisions.
10. Understand the interrelationship of work and life roles.
11. Understand changes in male/female roles and their impact on occupations.
12. Understand career planning and be able to make transitions.

Evidence continues to demonstrate that a competency based counseling and guidance curriculum teaches many of the basics needed for success in work, school, and home, as well as the skills and knowledge needed to make sound curriculum choices.

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[6]NOICC, 1989.

Delivering the Basic Skills, continued

The Selling of Vocational Education

In the past, vocational funding sometimes led counselors to sell vocational education and workbased learning as alternatives to academic class selections. This may have meant promoting vocational programs in a manner insensitive to both rapid changes in the economy and the basic skills needs of the workplace. Counselors focusing on the needs of students more than enrollment quotas were caught between (1) parental demands that students complete the seat time in academic courses to qualify them for admission to the state university and (2) vocational teachers' concern about decreasing vocational enrollments. Faced with this dilemma, and recognizing the need to better educate all students, counselors have indicated that vocational education is best promoted when vocational and academic education are seen as complementary strategies for student success, not as competing programs of study.

An example: The school district in Pittsburgh, Pennsylvania, has discontinued its general education track. With the general track gone, students need to make specific curriculum choices early on. This has made it necessary for guidance professionals to contact all students earlier and stay in contact with them. Each student in the Pittsburgh schools must plan and complete a focused curriculum leading to an academic or an applied technology and career development certificate, or both, before they can receive a diploma. To inform the community about the methods the district is using to infuse career education into curriculum, the district sends letters to parents of all eighth graders, and requires all tenth graders to view a video explaining graduation and certificate requirements within a group guidance class. Counselors now find it much easier to promote the merits of Pittsburgh's 40 vocational options and their relation to graduation, the workplace, and postsecondary education. This action, along with other initiatives, has significantly reduced dropout rates (personal communication, Fred Monaco, Division of Applied Technology and Career Development, 1991).

Planning Course Sequences

Schools that focus on acquisition of the "basic skills" recognize the critical role counselors play in helping students plan a demanding sequence of academic and vocational courses that prepares them both for employment and postsecondary education.

Gene Bottoms of the Southern Regional Education Board has stated that "every counselor knows the courses needed for students planning to go to college, but few can list the vocational and academic courses needed to pursue a technical career in electronics" (personal communication, 1990). He (Bottoms, 1989; Bottoms & Korcheck, 1989) argues that counselors can improve student planning and basic skills acquisition by:

1. rewriting student literature concerning school requirements to reflect a course of study adequate for both employment and postsecondary learning;

2. developing programs orienting students, parents, and teachers to the skills needed within the workplace and postsecondary education;
3. providing all students with an interest and aptitude assessment annually, starting no later than the eighth grade, to assist students in planning meaningful four year educational programs;
4. encouraging general and vocational students to pursue either a more rigorous academic and vocational program of study, or a more rigorous program of academic studies concentrated in at least one academic field; and
5. finding ways to get academic and vocational teachers to encourage students to take more math, lab science, and higher level courses.

New Guidance Efforts

Traditionally, counselors have responded to students who knew they had career needs. Little attention has been given to what has been called the "forgotten half" (William T. Grant Commission on Work, 1988) or the "neglected majority" (Parnell, 1985). The quality of U.S. school-to-work programs — programs which might particularly help this segment of students — was ranked last in the industrial world (U.S. Government Accounting Office, 1990). Without a comprehensive counseling and guidance program to address the needs of all students, most students receive little counseling and guidance assistance, or none at all.

All of this has fostered the need for outcome based comprehensive counseling and guidance programs. Efforts to address (1) the shortcomings of career guidance and (2) the limited commitment to planning a coherent and challenging program of vocational and academic study, are being supported by the Perkins Act, NOICC, and state and local initiatives.

Two examples of school districts that have implemented comprehensive counseling and guidance programs follow.

1. The National Career Development Guidelines led to Neptune, New Jersey's adoption of a career development curriculum. Before developing lesson plans for each grade level, curriculum developers used the Guidelines to identify the competencies needed by all middle and high school students. Consequently, in the sixth through eighth grades, the school guidance program focuses on the importance of a positive self concept, acquainting students with the world of work, and emphasizing the importance of planning for the future (personal communication, Russ Walling, 1991).

2. In Delta County, Colorado, where a nationally recognized technology based education program has been developed, counselors utilized the National Career Development Guideline Competencies and computer technology in each of their four high schools to produce a nine module, self directed career development exercise as part of the district-wide comprehensive counseling and guidance program. Using Hypercard, the Discover Career Information Delivery System, a laser disc player, and computer, all

freshmen create a career development plan, explore three out of a possible 12,000 vocational options, and access listings to postsecondary schools nationwide. Students also use an interactive laser disc program called "Attributes of Employability," complete a computerized job application, write a resume, and maintain their progress and grades (Feller & Daly, 1992).

The True Test of School Counseling and Guidance

As Jeanne Bleuer says, "The school counselor is foremost an educator supporting students in their progress through school and serving as a crucial resource for the academic program" (1989, p. 23). Comprehensive counseling and guidance programs can support school counselors in this role, helping counselors teach students how to plan their futures and acquire the basic skills needed for lifelong success.

The increasing focus on integrating academic and vocational coursework is leading toward a more demanding and focused program of study for every student. This, in turn, should lead to a higher premium being placed on counseling, guidance, and planning services for students. Fortunately, as its role in schools evolves and grows, the counseling and guidance community has solid comprehensive counseling and guidance models ready to implement.

The changes in the school counselor's role will demand counselors who are well informed about how they can help students learn to plan their futures and acquire the basic skills needed for lifelong success. Helping teachers help students acquire these skills will strengthen the counselor's role in schools. In this age of accountability, dovetailing school counseling services with school teaching services to enhance the relevance of secondary education is a positive move for all concerned.

References

Bleuer, J. (1989). Counseling underachievers: A counselor's guide to helping students improve their academic performance. Ann Arbor, MI: ERIC Counseling and Personnel Services Clearinghouse.

Bottoms, J. E., & Korcheck, S. A. (1989). Achievement of 1988 secondary vocational competencies. A report of the 1988 baseline assessment of the SREB-State Vocational Education Consortium using the national assessment of educational programs. Atlanta, GA: Southern Regional Education Board.

Bottoms, J. E. (1989, February). Closing the gap between vocational and academic education. Washington, DC: Policy Studies Association, Inc. (ERIC Document Reproduction Service No. ED 305 516)

Delivering the Basic Skills, continued

Carnevale, A. P., Gainer, L. J., & Meltzer, A. S. (1988). Workplace basics: The skills employers want. Alexandria, VA: American Society for Training and Development. (ERIC Document Reproduction Service No. ED 299 462)

Feller, R., & Daly, J. (1992, February). Counselors tackle the new basics. Vocational Education Journal, 67(2).

Gysbers, N., & Henderson, P. (1988). Developing and managing your school guidance program. Alexandria, VA: American Association for Counseling and Development.

Gysbers, N. (1990). Comprehensive guidance programs that work. Ann Arbor, MI: ERIC Counseling and Personnel Services Clearinghouse.

Hoyt, K. (1980). Evaluation of K-12 career education: A status report. Washington, DC: Office of Career Education.

National Occupational Information Coordinating Committee. (1989). National development guidelines: Local handbook for high schools. Washington, DC: NOICC.

Parnell, D. (1985). The neglected majority. Washington, DC: Community College Press.

Secretary's Commission on Achieving Necessary Skills (SCANS). (1991). What work requires of schools: A SCANS report for America 2000. Washington, DC: .S. Department of Labor.

United State Government Accounting Office. (1990). Training strategies: Preparing noncollege youth for employment in the U.S. and foreign countries. Washington, DC: Author.

William T. Grant Foundation Commission on Work, Family, and Citizenship. (1988). The forgotten half: Non-college youth in America: An interim report on the school-to-work transition. Washington, DC: Author.

Executive Summary[7]

The Secretary's Commission on Achieving Necessary Skills (SCANS) was asked to examine the demands of the workplace and whether our young people are capable of meeting those demands.

Specifically, the Commission was directed to advise the Secretary on the level of skills required to enter employment. In carrying out this charge, the Commission was asked to:

- Define the skills needed for employment;
- Propose acceptable levels of proficiency;
- Suggest effective ways to assess proficiency; and
- Develop a dissemination strategy for the nation's schools, businesses, and homes.

This report results from our discussions and meetings with business owners, public employers, unions, and workers and supervisors in shops, plants, and stores. It builds on the work of six special panels we established to examine all manner of jobs from manufacturing to government employment. We also commissioned researchers to conduct lengthy interviews with workers in a wide range of jobs.

The message to us was universal: good jobs will increasingly depend on people who can put knowledge to work. What we found was disturbing: more than half our young people leave school without the knowledge or foundation required to find and hold a good job. These young people will pay a very high price. They face the bleak prospects of dead-end work interrupted only by periods of unemployment.

Two conditions that arose in the last quarter of the 20th Century have changed the terms for our young people's entry into the world of work: the globalization of commerce and industry and the explosive growth of technology on the job. These developments have barely been reflected in how we prepare young people for work or in how many of our workplaces are organized. Schools need to do a better job and so do employers. Students and workers must work smarter. Unless they do, neither our schools, our students, nor our businesses can prosper.

SCANS research verifies that what we call *workplace know-how* defines effective job performance today. This know-how has two elements: *competencies* and a *foundation*. This report identifies five competencies and a three-part foundation of skills and personal qualities that lie at the heart of job-performance. (See pages xvii and xviii.) These eight requirements are essential preparation for all students, both those going directly to work and those planning further education. Thus, the competencies and the foundation should be taught and understood in an integrated fashion that reflects the workplace *contexts* in which they are applied.

We believe, after examining the findings of cognitive science, that the most effective way of learning skills is "in context," placing learning objectives within a real environment rather than insisting that students first learn in the abstract what they will be expected to apply.

The five SCANS competencies span the chasm between school and the workplace. Because

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[7]The Secretary's Commission on Achieving Necessary Skills (SCANS). (1991). What work requires of schools: A SCANS report for America 2000. Washington, DC: U.S. Department of Labor.

Executive Summary, continued

they are needed in workplaces dedicated to excellence, they are hallmarks of today's expert worker. And they lie behind the quality of every product and service offered on today's market.

The competencies differ from a person's technical knowledge. For example, both accountants and engineers manage resources, information, systems, and technology. They require competence in these areas even though building a bridge has little to do with balancing a set of books. But in each profession, the competencies are at least as important as technical expertise. The members of the Commission believe these competencies are applicable from the shop floor to the executive suite. In the broadest sense, the competencies represent the attributes that today's high-performance employer seeks in tomorrow's employee.

To describe how this know-how is used on the job, our report provides a series of five scenarios that portray work requirements in the context of the real world. The scenarios show that work involves a complex interplay among the five competencies we have identified and the three elements of the foundation—the **basic skills**, higher order **thinking skills**, and diligent application of **personal qualities**.

The scenarios make clear that tomorrow's career ladders require even the basic skills—the old 3 Rs—to take on a new meaning. First, all employees will have to **read** well enough to understand and interpret diagrams, directories, correspondence, manuals, records, charts, graphs, tables, and specifications. Without the ability to read a diverse set of materials, workers cannot locate the descriptive and quantitative information needed to make decisions or to recommend courses of action. What do these reading requirements mean on the job? They might involve:

- interpreting blueprints and materials catalogues;
- dealing with letters and written policy on complaints;
- reading patients' medical records and medication instructions; and
- reading the text of technical manuals from equipment vendors.

At the same time, most jobs will call for **writing skills** to prepare correspondence, instructions, charts, graphs, and proposals, in order to make requests, explain, illustrate, and convince. On the job this might require:

- writing memoranda to justify resources or explain plans;
- preparing instructions for operating simple machines;
- developing a narrative to explain graphs or tables; and
- drafting suggested modifications in company procedures.

Mathematics and **computational skills** will also be essential. Virtually all employees will be required to maintain records, estimate results, use spreadsheets, or apply statistical process controls as they negotiate, identify trends, or suggest new courses of action. Most of us will not leave our mathematics behind us in school. Instead, we will find ourselves using it on the job, for example, to:

- reconcile differences between inventory and financial records;

Executive Summary, continued

FIVE COMPETENCIES

Resources: Identifies, organizes, plans, and allocates resources

A. *Time*—Selects goal-relevant activities, ranks them, allocates time, and prepares and follows schedules
B. *Money*—Uses or prepares budgets, makes forecasts, keeps records, and makes adjustments to meet objectives
C. *Material and Facilities*—Acquires, stores, allocates, and uses materials or space efficiently
D. *Human Resources*—Assesses skills and distributes work accordingly, evaluates performance and provides feedback

Interpersonal: Works with others

A. *Participates as Member of a Team*—contributes to group effort
B. *Teaches Others New Skills*
C. *Serves Clients/Customers*—works to satisfy customers' expectations
D. *Exercises Leadership*—communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies
E. *Negotiates*—works toward agreements involving exchange of resources, resolves divergent interests
F. *Works with Diversity*—works well with men and women from diverse backgrounds

Information: Acquires and uses information

A. *Acquires and Evaluates Information*
B. *Organizes and Maintains Information*
C. *Interprets and Communicates Information*
D. *Uses Computers to Process Information*

Systems: Understands complex inter-relationships

A. *Understands Systems*—knows how social, organizational, and technological systems work and operates effectively with them
B. *Monitors and Corrects Performance*—distinguishes trends, predicts impacts on system operations, diagnoses deviations in systems' performance and corrects malfunctions
C. *Improves or Designs Systems*—suggests modifications to existing systems and develops new or alternative systems to improve performance

Technology: Works with a variety of technologies

A. *Selects Technology*—chooses procedures, tools or equipment including computers and related technologies
B. *Applies Technology to Task*—Understands overall intent and proper procedures for setup and operation of equipment
C. *Maintains and Troubleshoots Equipment*—Prevents, identifies, or solves problems with equipment, including computers and other technologies

Executive Summary, continued

- estimate discounts on the spot while negotiating sales;
- use spreadsheet programs to monitor expenditures;
- employ statistical process control procedures to check quality; and
- project resource needs over the next planning period.

Finally, very few of us will work totally by ourselves. More and more, work involves listening carefully to clients and co-workers and clearly articulating one's own point of view. Today's

A THREE-PART FOUNDATION

Basic Skills: Reads, writes, performs arithmetic and mathematical operations, listens and speaks

A. *Reading*—locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules

B. *Writing*—communicates thoughts, ideas, information, and messages in writing; and creates documents such as letters, directions, manuals, reports, graphs, and flow charts

C. *Arithmetic/Mathematics*—performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques

D. *Listening*—receives, attends to, interprets, and responds to verbal messages and other cues

E. *Speaking*—organizes ideas and communicates orally

Thinking Skills: Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, and reasons

A. *Creative Thinking*—generates new ideas

B. *Decision Making*—specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative

C. *Problem Solving*—recognizes problems and devises and implements plan of action

D. *Seeing Things in the Mind's Eye*—organizes, and processes symbols, pictures, graphs, objects, and other information

E. *Knowing How to Learn*—uses efficient learning techniques to acquire and apply new knowledge and skills

F. *Reasoning*—discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem

Personal Qualities: Displays responsibility, self-esteem, sociability, self-management, and integrity and honesty

A. *Responsibility*—exerts a high level of effort and perseveres towards goal attainment

B. *Self-Esteem*—believes in own self-worth and maintains a positive view of self

C. *Sociability*—demonstrates understanding, friendliness, adaptability, empathy, and politeness in group settings

D. *Self-Management*—assesses self accurately, sets personal goals, monitors progress, and exhibits self-control

E. *Integrity/Honesty*—chooses ethical courses of action

Executive Summary, continued

worker has to **listen** and **speak** well enough to explain schedules and procedures, communicate with customers, work in teams, understand customer concerns, describe complex systems and procedures, probe for hidden meanings, teach others, and solve problems. On the job, these skills may translate readily into:

- training new workers or explaining new schedules to a work team;
- describing plans to supervisors or clients;
- questioning customers to diagnose malfunctions; and
- answering questions from customers about post-sales service.

SCANS estimates that less than half of all young adults have achieved these reading and writing minimums; even fewer can handle the mathematics; and, schools today only indirectly address listening and speaking skills.

Defining the minimum levels of proficiency in the SCANS competencies is also a crucial part of the Commission's task. It requires judgments about the learning possible in yet-to-be designed schools. It also requires imagining what the workplaces of the year 2000 could and should look like.

Our work on these required levels of proficiency is not complete. We have examined less than a third of the jobs we intend to research. We also wish to hear what others think of our initial efforts. The insert at the top of page xx is illustrative of our initial estimates of work-ready levels of proficiency in the five competencies. Proficiency in each competency requires proficiency in the foundation. The contexts displayed come from more extensive scenarios contained in our report. The point we wish to make is that young people leaving school should have both a sufficient foundation and level of understanding of the competencies to exhibit performances like those illustrated.

The minimums we propose will define what makes a young person ready for work at entry levels on career ladders. They represent neither the first nor last step in a process of life-long learning. Instead, the minimums will be a second step in a progression of skills acquisition. For example, consider scheduling time, part of the SCANS **resources** competency. A young student (at the preparatory stage) might be expected to make a schedule for him or herself. Being *work-ready* would require making a schedule for others. At the extreme, a specialist might develop schedules for an airline. (See insert at bottom of page xx.)

In September 1989 President Bush and the nation's governors agreed to six national goals in education to be achieved by the year 2000. By April 1991 a four-part strategy to attain these six goals was announced by President Bush and Secretary of Education Lamar Alexander. This report of the Secretary of Labor's Commission on Achieving Necessary Skills speaks directly to those goals and to that strategy. It defines what our young people must know and be able to do in order to hold a decent job and earn a decent living.

Our work pertains directly to National Goals #3 and #5 which state:

Goal #3 American students will leave grades four, eight, and twelve having demonstrated competency in challenging subject matter including English,

Executive Summary, continued

KNOW-HOW: WORK-READY LEVEL OF PROFICIENCY

COMPETENCE	EXAMPLE OF LEVEL
RESOURCES	Develop cost estimates and write proposals to justify the expense of replacing kitchen equipment. Develop schedule for equipment delivery to avoid closing restaurant. Read construction blueprints and manufacturers' installation requirements to place and install equipment in the kitchen.*
INTERPERSONAL	Participate in team training and problem-solving session with multicultural staff of waiters and waitresses. Focus on upcoming Saturday night when local club has reserved restaurant after midnight for party. Three people cannot work and team has to address the staffing problem and prepare for handling possible complaints about prices, food quality, or service.*
INFORMATION	Analyze statistical control charts to monitor error rate. Develop, with other team members, a way to bring performance in production line up to that of best practice in competing plants.**
SYSTEMS	As part of information analysis above, analyze painting system and suggest how improvements can be made to minimize system downtime and improve paint finish.**
TECHNOLOGY	Evaluate three new paint spray guns from the point of view of costs, health and safety, and speed. Vendors describe performance with charts and written specifications. Call vendors' representatives to clarify claims and seek the names of others using their equipment. Call and interview references before preparing a report on the spray guns and making a presentation to management.**

PROGRESS IN ACQUIRING SKILLS

PROFICIENCY LEVEL	PERFORMANCE BENCHMARK
PREPARATORY	Scheduling oneself
WORK-READY	Scheduling small work team
INTERMEDIATE	Scheduling a production line or substantial construction project
ADVANCED	Developing roll-out schedule for new product or production plant
SPECIALIST	Develop algorithm for scheduling airline

*Competence as demonstrated in a service sector application.
**Competence as demonstrated in a manufacturing sector application.

mathematics, science, history, and geography; and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and *productive employment in our modern economy.* (emphasis added)

Goal #5 Every adult American will be literate and will *possess the knowledge and skills necessary to compete in a global economy* and exercise the rights and responsibilities of citizenship. (emphasis added)

Our report is intended to contribute to all four parts of the strategy put forth by President Bush in AMERICA 2000 as shown below.

Workforce know-how will be part of the new World Class Standards. However, defining competencies and a foundation is not enough. Schools must teach them. Students must learn them. And, they should be assessed as part of the AMERICA 2000 agenda. Our work on these issues will continue over the coming months. Among the concrete steps SCANS will take in the future are efforts to:

- examine how to create an assessment system that helps students understand what they have to learn and certifies that they have mastered the competencies so that employers and colleges will honor their record of high school performance;
- consider the implications of the SCANS findings for curriculum development, school organization, teacher training, and instructional materials and technology; and
- help the Administration establish the public-private partnership called for in the education strategy, "AMERICA 2000."

The President of the United States has encouraged all of us to become revolutionaries in the cause of education. For over 200 years

EXCERPTS FROM AMERICA 2000's FOUR-PART STRATEGY[1]

Part 1.

"For Today's Students: Better and More Accountable Schools – World Class Standards: . . . . These standards will incorporate both knowledge and skills, to ensure that, when they leave school, young Americans are prepared for further study and the work force."

Part 2.

"For Tomorrow's Students: A New Generation of American Schools. New American Schools: help communities create schools that will reach the national education goals, including World Class Standards."

Part 3.

"For the Rest of Us (Yesterday's Students/Today's Work Force): A Nation of Students – Private-Sector Skills and Standards: Business and labor will be asked...to establish job-related skill standards, built around core proficiencies...."

Part 4.

"Communities Where Learning Can Happen." AMERICA 2000 Communities. The president is challenging every city, town, and neighborhood... to adopt the six national education goals... [and] develop a report card for measuring progress."

[1]The White House, April 18, 1991.

Executive Summary, continued

Americans have worked to make education part of their national vision, indispensable to democracy and to individual freedom. For at least the last 40 years, we have worked to further the ideal of equity—for minority Americans, for the disabled, and for immigrants. With that work still incomplete, we are called to still another revolution—to create an entire people trained to think and equipped with the know-how to make their knowledge productive.

This new revolution is no less exciting or challenging than those we have already completed. Nor is its outcome more certain. All that is certain is that we must begin.